

SOME INJURIOUS WEEVILS IN HAITI (CURCULIONIDAE)

By BARRY D. VALENTINE AND BUENA S. VALENTINE¹

This note is the first in a proposed series covering rhyncophora collected by us in Haiti and Jamaica during the summer of 1956. Its purpose is to record, for the first time in Haiti, several weevil genera of widespread economic significance. At least three appear to be new records for the Island of Hispaniola, and two are new for the West Indies.

The Republic of Haiti occupies the western end of Hispaniola, and is one of the most interesting and least known sites for entomological research. The fauna contains many unique genera and species which are unknown outside the island, and also others which appear to be ancestral to mainland forms. The great majority of coleopterous species are still undescribed, for in most families, little has been published. We were fortunate in being able to collect insects in the three major zoogeographic regions of Haiti: the two-thirds of the country north of Port-au-Prince; the Massif de La Selle, south and east of Port-au-Prince; and the Massif de La Hotte, forming the western half of the southern peninsula.

The courtesy and helpfulness of the officials of the Haitian Department of Agriculture are gratefully acknowledged, for without their assistance and planning, we would have been unable to collect in the Forêt des Pins, the pine forest which clothes Morne La Selle and the surrounding mountains.

Pissodes sp. It was a surprise to discover a close relative of our white pine weevil, *Pissodes strobi* (Peck) living in the magnificent 45,000 acre forest of *Pinus occidentalis* which covers the higher altitudes of southeastern Haiti. This appears to be the first record of the genus in the West Indies, all previously known localities being continental, where species occur from Canada to Mexico, and still others in Europe. The Haitian specimens actually appear closest to *Pissodes nemorensis* Germar, of southeastern United States, but can be separated from that species by their longer beaks. Differences between some members of the genus, however, appear quite variable, so final allocation must await further studies.

Hylobius n. sp. The same pine forest also yielded a species of curculionid related to the pales weevil (*Hylobius pales* Boheman) of eastern United States. The genus contains several species distributed from Canada to Brasil, and others in Europe. The Haitian specimens can be distinguished from all the New World forms by the presence of a punctured, but otherwise smooth pronotum, and smooth elytral intervals; while the pronotum in mainland species has well-developed longitudinal

¹ Department of Biology, Mississippi Southern College, Hattiesburg, Mississippi.

grooves and ridges, or if smooth, the elytra are carinate. Available descriptions of the European species are vague, but at least two are said to possess thoraxes and elytra similar to those of the Haitian insects.

The only record for the genus in the West Indies is that of Wolcott who, in his series on the insects of the Puerto Rico (1948, Jour. Ag. Univ. P. R. 32(2):398), mentions the occurrence of *Hylobius pales* "in a room in San Juan." It is possible that Wolcott's material is not *H. pales*, certainly the finding of the first autochthonous West Indian species in Haiti suggests that the Puerto Rican specimens should be reexamined and verified.

Both of the above genera were found on slash, and under boards and logs of *Pinus occidentalis*, the only native pine. The collections were made at an approximate elevation of 5,500 feet at the settlement called Refuge on Haitian maps, about 22 kilometers (by road) southeast of Fond Verrettes, during the period July 17, to 19, 1956. Most of the specimens were concentrated around the lumber mill at Refuge, a few came to lights at the guest houses about a half mile away. It was difficult to make any assessment of damage to the pines because large numbers of young trees had been killed by an unusually heavy frost the previous winter. Ordinarily, it is these young trees which show the most weevil damage. Final description of the Haitian species of *Pissodes* and *Hylobius* must await the opportunity for comparison with European species and some additional study.

Pantomorus godmani (Crotch). Fuller's Rose Beetle. This widely distributed and omnivorous pest has been recorded from all continents and many countries. We wish to make known what may be the first record from the West Indies. Seven specimens were collected about two miles north of Furey, Haiti, on July 10, 1956, by sweeping a weedy, roadside legume. The species is of particular interest for two reasons. First, it is flightless, and therefore was probably introduced to the island by man. If this were the case, the weevil would logically be expected in the lowlands around Port-au-Prince. Strangely, no specimens were found during lowland collecting, the Furey locality being about ten miles (twenty by road) above Port-au-Prince at an elevation close to 4,500 feet. Second, the species reproduces parthenogenetically, no males having ever been found among over a thousand individuals. The significance of a parthenogenetic condition in an economic pest is due to the fact that any individual is sufficient to start a new colony, and in addition, any beneficial mutation occurring during the development of one individual is immediately passed on to all of the offspring, providing a mechanism for rapid evolution.

Cosmopolites sordidus (Germar). The Banana Root Borer. This sluggish, black bill-bug is widely distributed in the banana growing regions of the world. Wolcott (*op. cit.*, p. 413) mentions the abundance of *Cosmopolites* in Puerto Rico and Cuba, and its absence in Hispaniola and Jamaica. We found it abundant in both of the latter localities. Both larvae and adults attack living plants, boring in the bulbs and pseudostems. In Haiti, the species occurs mostly at lower elevations (Damien and Plaisance). Several careful attempts were made to collect specimens (at elevations around 4,000 feet) in the vicinity of Kenscoff. Neither adults, larvae, nor larval workings were found. The species is an extremely constant one, specimens from Haiti, Jamaica, Honduras, and Ecuador being remarkably uniform.

Metamasius sp. (*hemipterus* Linnaeus or *sericeus* Olivier). Sugar Cane Borer. The taxonomic status of *hemipterus* and *sericeus* is not clear. Both names are commonly linked with sugar cane, while only *sericeus* is discussed with bananas. All authors agree that the two species are very closely related, and none give an adequate means of separating them. The recorded distribution is also interesting. In the Greater Antilles, *M. hemipterus* is recorded from Jamaica, Puerto Rico, and the Virgin Islands, while *M. sericeus* is listed from Cuba and Hispaniola. In the Lesser Antilles, *hemipterus* is from Antigua, Barbados, Dominica, Guadeloupe, and St. Vincent, while *sericeus* is from St. Lucia. In Central America, *hemipterus* is not listed, while *sericeus* is recorded from British Honduras, Costa Rica, Guatemala, Honduras, Mexico, Nicaragua, and Panama. In South America, *hemipterus* is mentioned from Brasil, French Guiana, and Venezuela, while *sericeus* is mentioned from Peru. The only localities in which both are included are St. Kitts and Colombia. Out of twenty-two countries or islands, only two are listed as having both forms. It appears possible that the records all apply to a single, variable, wide ranging species, but unfortunately, available literature is too vague to settle the point, and all of the extensive series of specimens studied by us (from Jamaica, Honduras, Costa Rica, and Ecuador) have been associated exclusively with bananas. Until we have seen the sugar cane insects it is impossible to decide on the correct status of the two names.

The banana specimens can run rapidly and fly readily. They are said to be secondary pests, inhabiting plants which have been killed or injured by other causes. Actually, the species has often been observed in living pseudostems, and there is no reason why it could not become a primary pest during periods of abundance.

We did not collect *Metamasius* in Haiti, but its presence in the country is attested to by specimens from Damien in the insect collections of the

Bureau of Entomology of the Haitian Department of Agriculture. Pin label data definitely associate the specimens with banana.

As soon as taxonomic studies on the above material can be completed, specimens of each species will be deposited with the Bureau of Entomology at Damien, Haiti. At the moment, all specimens are at Mississippi Southern College.

RECORDS OF *STRIGODERMA TEAPENSIS* BATES FROM THE UNITED STATES (SCARABAEIDAE)

By O. L. CARTWRIGHT¹

Recently a small scarab beetle submitted for determination from Brownsville, Texas, was found to be *Strigoderma teapensis* Bates, a Mexican species apparently not previously listed in the literature as occurring in the United States. The collection of the United States National Museum now contains nine specimens from Texas bearing other data as follows: 1, El Paso, October 22, 1922, L. E. Dorland, det Ohaus; 3, Eagle Pass, April 2, 1923, C. E. Bellis; 2, Columbus, May 26, Wickham, and Hubbard and Schwarz; 2, Galveston, May, F. H. Snow; and Brownsville, April 17, 1956, J. E. Mabry, Jr.

Strigoderma teapensis Bates varies from 6.5 to 8 mm. in length, and from 4 to 5 mm. in width. Six of the specimens seen have the elytra, the base of the pronotum opposite the scutellum, and the lateral margins of the pronotum rather narrowly flavo-testaceous, all other parts fuscous; the other three specimens are concolorous brownish black or fuscous. The head and pronotum in all cases have a faint coppery lustre. Specimens with light colored elytra have the scutellum, the extreme elytral margin apically, and parts of the four lateral striae near the shoulders brownish black. The head and sparsely hairy pronotum are closely punctate. The elytra are short and wide, usually less than 0.5 mm. longer than wide. The distinctly punctate elytral striae number six or seven between the suture and humeral callus. The posterior femora and tibiae are unusually short and wide, the tibiae being shorter than the femora and slightly less than twice as long as wide.

Strigoderma teapensis Bates is easily separated from *arboricola* (Fab.) and *pygmaea* (Fab.), the two common species in the United States, by its intermediate size, the number of discal striae between the suture and humeral callus, and especially by the wide, short femora and tibiae. *Strigoderma arboricola* is 10 to 12 mm. in length with 8 striae, while *pygmaea* is only 5 to 6 mm. in length with five discal striae.

¹United States National Museum, Smithsonian Institution, Washington, D. C.